



Department of Energy

Workforce Analysis

July 2001

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- H. What barriers (statutory, administrative, physical, or cultural) has the agency identified to achieving workforce restructuring?

DEPARTMENT OF ENERGY WORKFORCE ANALYSIS IN RESPONSE TO OMB BULLETIN 01-07

The Department of Energy's response has been developed, as required by OMB Bulletin 01-07, as a snapshot of the Department as of September 30, 2000. This information will be used to help build a more detailed 5-year workforce restructuring plan for improving human capital management and addressing management reform initiatives including increased use of performance-based contracts, expanded application of on-line procurement, expanded A-76 competitions and increased accuracy of FAIR Act inventories. To date, many of these efforts are proceeding on parallel tracks and will be more fully integrated as the Department moves into the 5-year planning effort required by OMB Bulletin 01-07.

Introduction:

The Department of Energy's mission is:

To foster a secure and reliable energy system that is environmentally and economically sustainable; to be a responsible steward of the Nation's nuclear weapons; to clean up the Department's facilities; to lead in the physical sciences and advance the biological, environmental, and computational sciences; and to provide premier scientific instruments for the Nation's research enterprise.

The Department develops and implements energy policy and manages a vast array of technical programs. The Department's nationwide complex consists of headquarters and field organizations, national laboratories, nuclear weapons production plants, power marketing administrations, and special-purpose offices. DOE has approximately 14,700 Federal employees and over 100,000 contractor employees working at over 50 major installations in 35 states. The DOE complex includes unique capabilities in science and engineering that support the Department's goals in the areas of National Nuclear Security, Environmental Quality, Energy Resources, and Science.

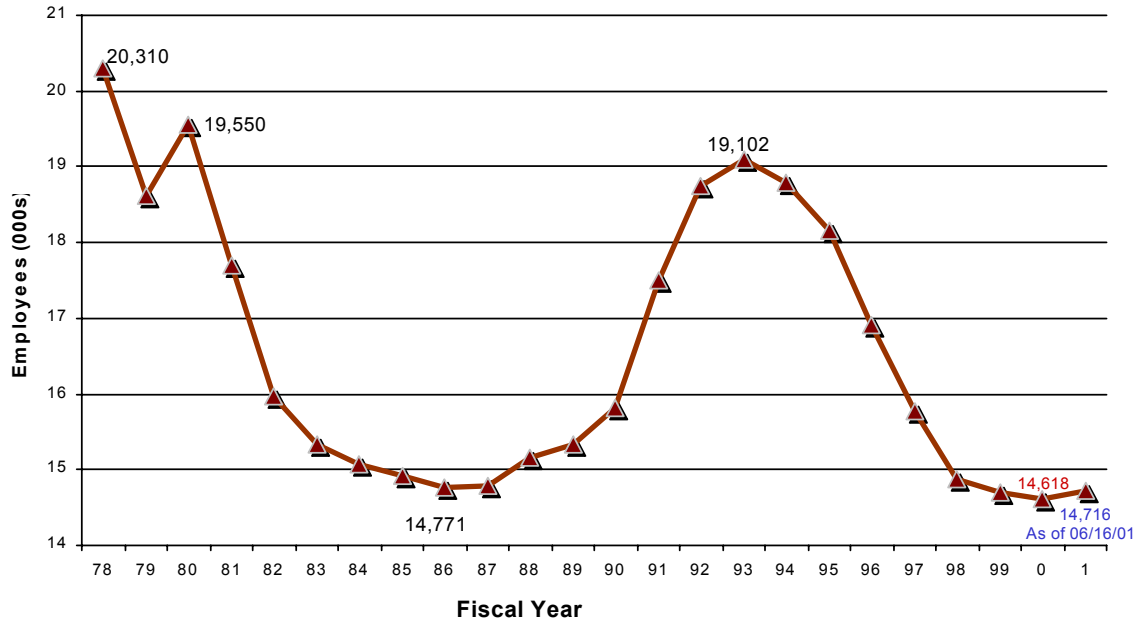
Background:

In FY 1995, the Department initiated a Strategic Alignment Initiative (SAI) which resulted in some changes to DOE's organizational structure and downsizing the Federal and contractor workforce over a 5-year period ending in FY 2000. By November of 1998, the Department had already reduced its Federal workforce, not including the Power Marketing Administrations, by 3,300 employees or 24%. Today, the reduction from 1995 levels stands at 27%. The actual reductions exceeded the self imposed targets in all fiscal years, due largely to accelerated budget reductions requiring the use of reduction in force, furlough, buyouts, early retirements, and severe hiring restrictions. Though the Department attempted to begin rebuilding its technical workforce in FY 1999, budget shortfalls and Congressionally-mandated field reductions

curtailed those efforts causing further reductions to an already depleted workforce. The attached employment history chart (attachment 1) shows DOE's Federal workforce staffing profile since its formation in 1977.



Employment History



Attachment 1

Information excludes FERC

Demographics

The demographic information required by OMB Bulletin 01-07 is provided at four levels in accordance with discussions with OMB: Department-wide, headquarters, field, Power Marketing Administrations, and for the Department's technical workforce (see definition in attachment 2).

Basic demographic information on the permanent Federal workforce including age, grade, retirement eligibility and expected retirements over the next five years, and attrition, including trends in recent retirements over the past five years.

There is currently much attention being paid to the rapidly increasing average age of the Federal workforce, the declining number of employees in highly technical occupations, the increasing proportion eligible for retirement, and the lack of younger employees in the "pipeline" who could fill behind potential retirees. What follows is a snapshot of data for various segments of the Department's Federal workforce.

The salient points of the DOE workforce analysis are summarized as follows:

Age of the Workforce:

- The age bracket containing the largest number of employees is 50-55 (24%) with another 20% of the workforce over age 55. The average age of the Department is 48, (as compared to a Government-wide average of 46), showing little difference between the various components of the Department's workforce. Department-wide only 9% of the employee population is under 35, with that percentage dropping to 6% in the Technical workforce, a serious concern in the area of succession planning and in assuring that the Department has the benefit of the new ideas and technological capabilities typically associated with recent college graduates.

Grade Levels of the Workforce:

- A review of the Department's grade distribution indicates, as would be expected, a skew toward higher levels because of the highly technical and professional nature of DOE missions. The number of higher graded employees is also evidence of a long period of very limited hiring where the few hiring opportunities were used for critical capabilities and resulted in hiring at the higher levels to ensure that new employees could "hit the ground running." As with age, the grade ranges indicate limited entry-level hiring.

Retirement Eligibility of the Workforce:

- The percentage of DOE employees eligible to retire will approach one-third of the workforce by 2005, with an even greater proportion of employees eligible at Headquarters. It should be noted, however, that retirement eligibility in the Department is only slightly higher than that across the Federal Government.

- Comparing retirement eligibility against actual retirements over each of the last five years shows that only about one-fifth of those eligible actually retired.

Attrition Experience:

- Opportunities to rebuild and restructure the workforce have been limited by the fact that total attrition for the Department has declined over the past four years from a high of 10% in 1997 to 6% in 2000. Higher attrition rates exist at the Headquarters, with a high in 1997 of 12%, down to 8% in 2000.

The Department is faced with ample evidence suggesting that workforce planning is becoming increasingly critical and must be combined with an active effort to recruit high quality employees at multiple levels to ensure the long term health of the Department. The intertwined symptoms of an aging workforce, a dearth of employees in the grades at or below the journeyman level (most particularly in the Technical workforce), and increased retirement eligibility over the next five years, presents a very challenging situation in DOE and in the Federal workforce at large.

DEPARTMENT OF ENERGY
TECHNICAL WORKFORCE

Occupational Families:

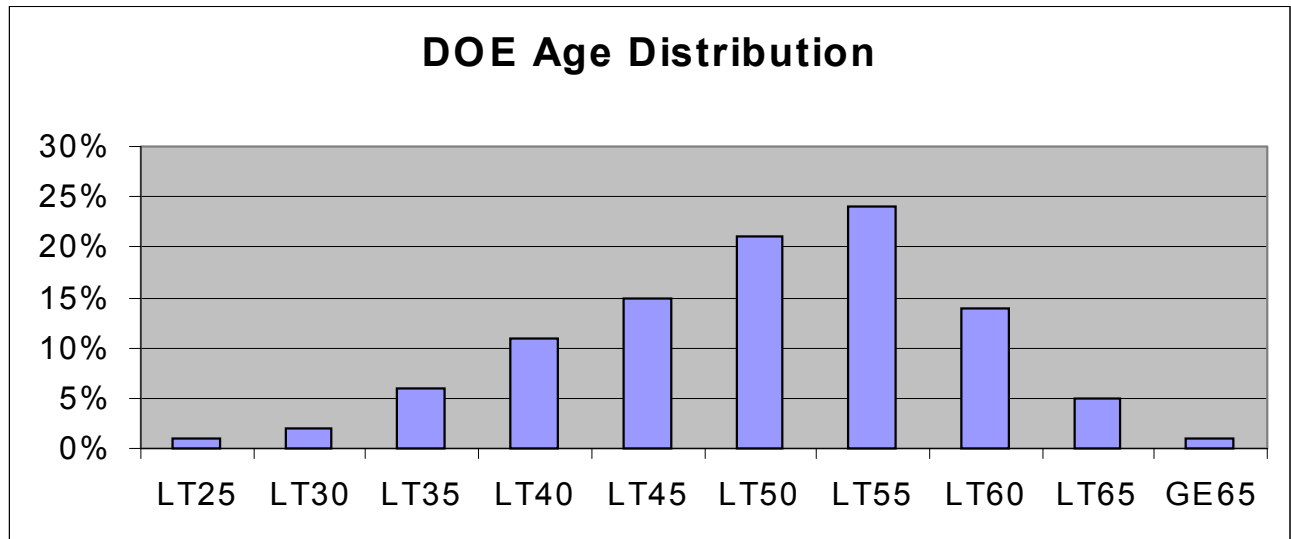
0800	Engineering
1300	General Physical Science

Occupational Series:

018	Safety & Occupational Health Manager
019	Safety Technician
028	Environmental Protection Specialist
029	Environmental Protection Assistant
081	Fire Protection & Prevention Specialist
690	Industrial Hygienist
698	Environmental Health Technician
1910	Quality Assurance Specialist

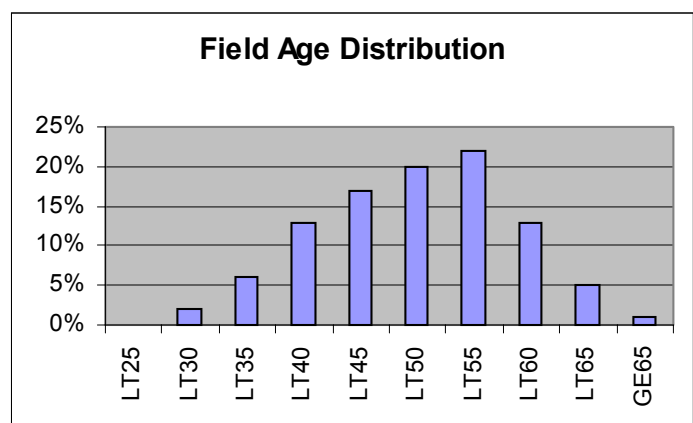
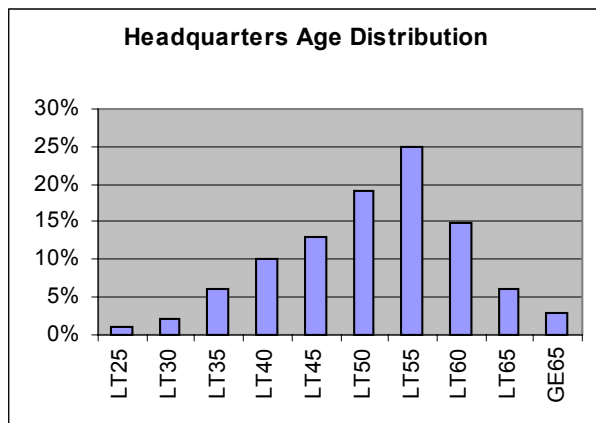
Plus all employees hired under the Excepted Service authority (Pay Plan EK) provided to the Department under the Defense Authorization act to support scientific and technical needs.

Age of the Workforce

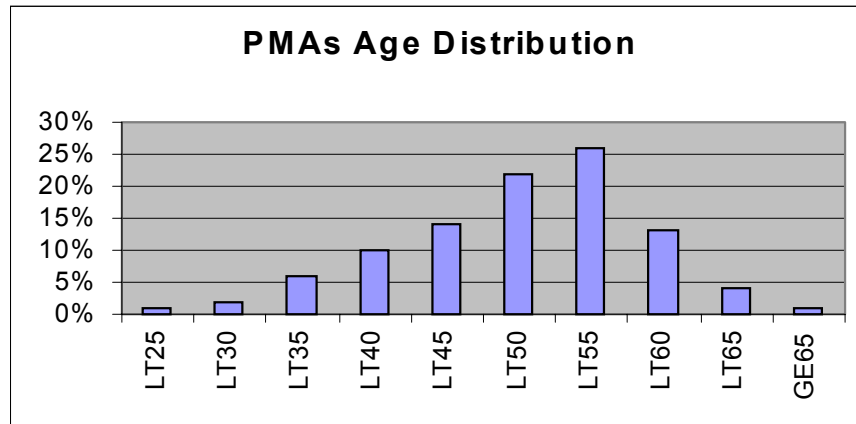


Note: In the charts on age, LT means Less Than and GE means Greater than or Equal to.

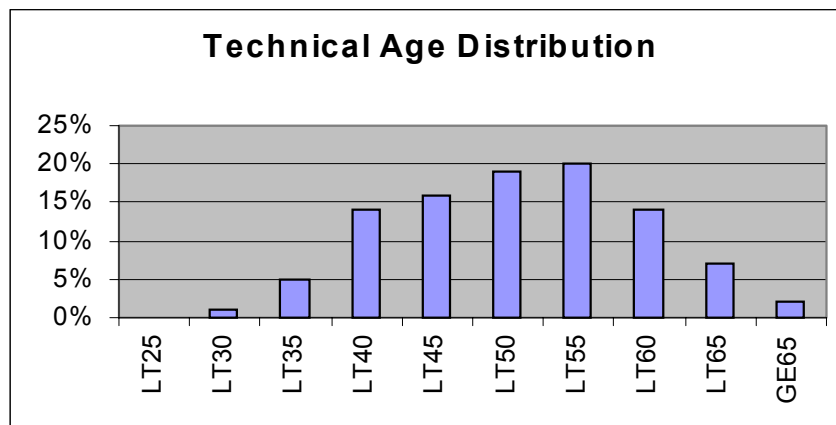
As can be seen from the graph above, the greatest concentration of permanent employees in DOE is in the age bracket 50-55; the average age is 48.



The Headquarters and Field show the same age bracket (less than 55) contains the greatest number of employees though the percentage is slightly greater in Headquarters. In Headquarters 24% of the workforce is 55 or above, with only 9% under 35, whereas in the Field 19% is 55 or above, with 8% under 35.

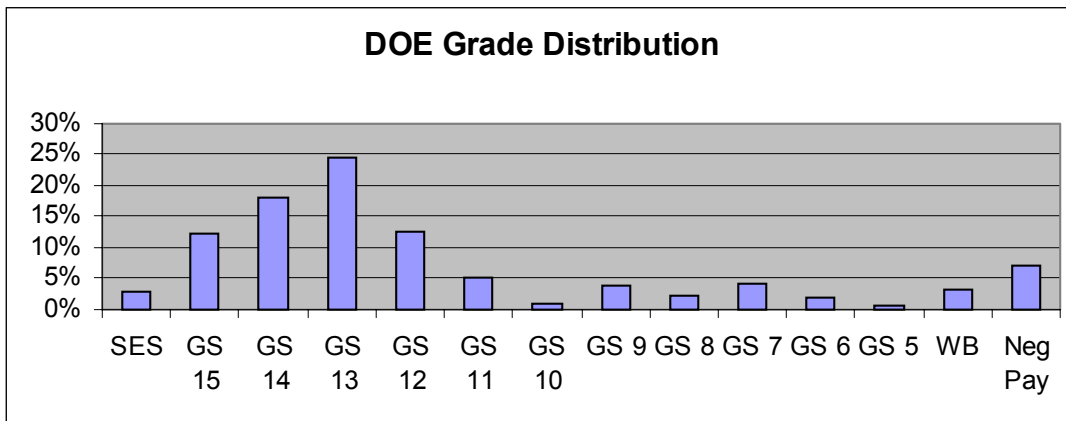


The Power Marketing Administrations have an age distribution similar to that of the Department as a whole.



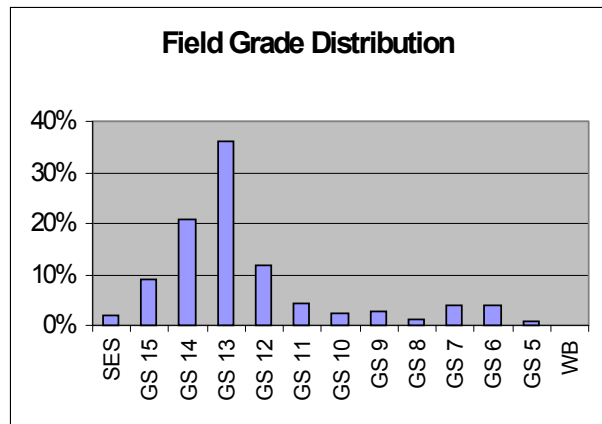
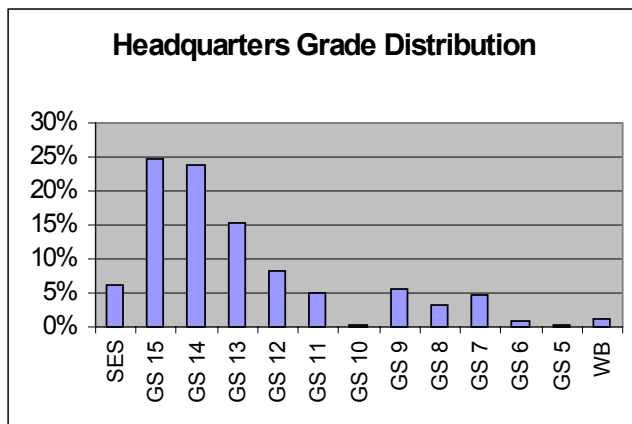
The average age of the technical workforce is 48, the same as that for the Department as a whole. Only 6% of the technical workforce is under 35.

Grade Levels of the Workforce

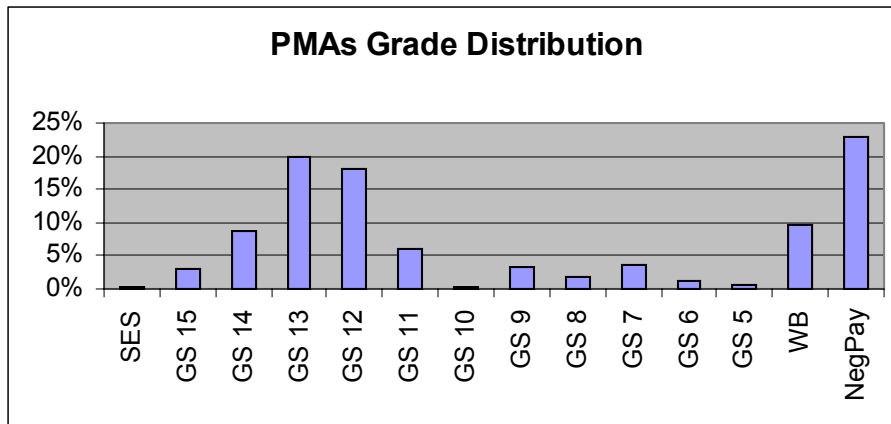


Note: WB stands for wage board or blue collar positions and Neg Pay refers to positions in the Power Marketing Administrations for which pay is negotiated with labor unions as provided for by law.

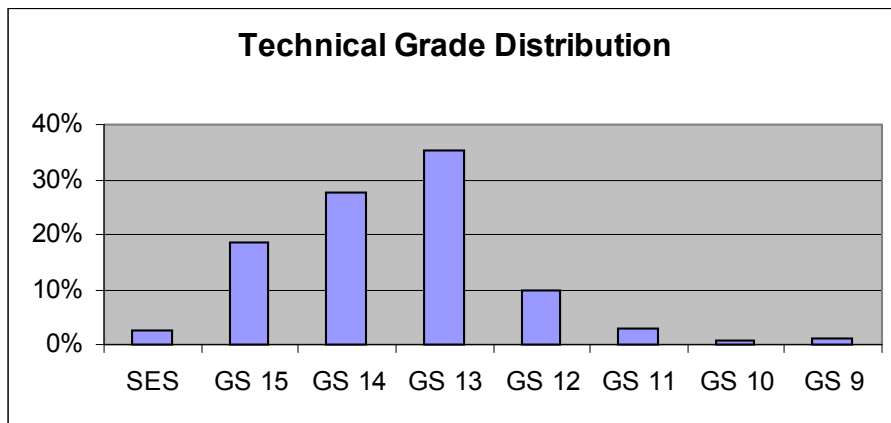
The largest number of permanent employees is at the GS-13 level. The number of GS-12s and below, from which future GS-13s and senior level employees can be drawn, is significantly smaller, creating succession planning challenges.



In the Headquarters, the largest number of employees are at the GS-14 and GS-15 levels, consistent with key roles in policy development and oversight, while the largest number of Field employees are at the GS-13 level. In both the Headquarters and the Field, the pipeline of employees at lower grades is extremely limited.

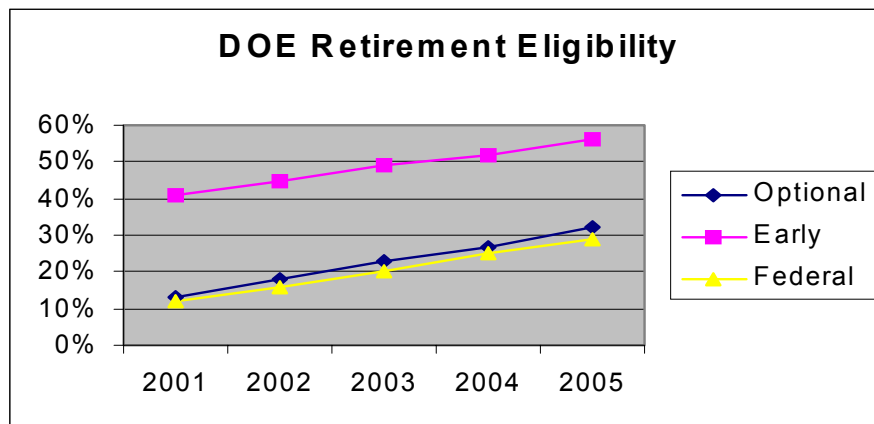


In the Power Marketing Administrations, aside from the 23% of employees on Negotiated Pay, the largest number of employees is GS-13. Unlike the Headquarters and the Field, the Power Marketing Administrations do have a large GS-12 population to draw from but a limited GS-11 and below population, pushing the “pipeline” problem to the lower levels.

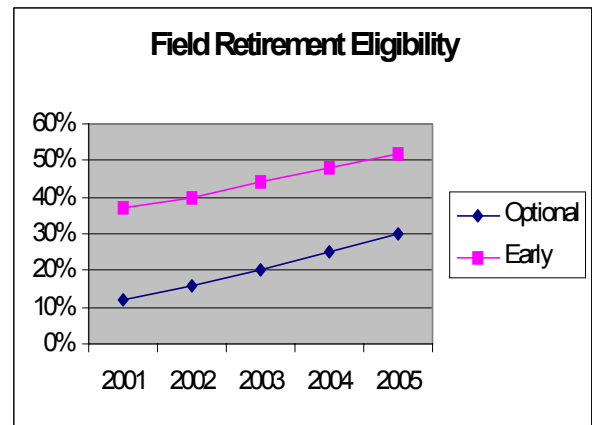
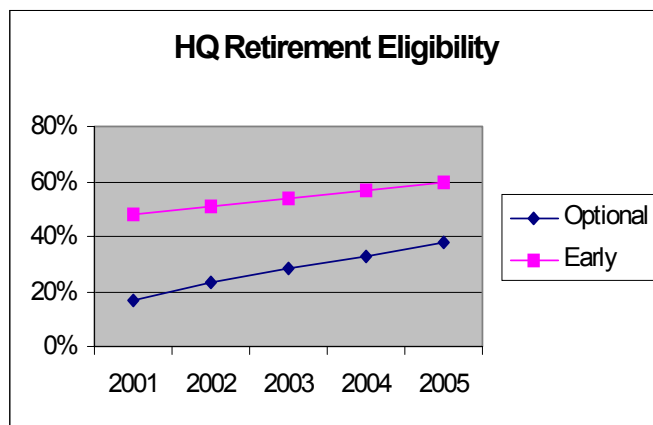


In the Technical workforce, the discrepancy between the percentage of GS-13 employees (the most numerous) and that of the GS-12s is larger than in the other employee populations. Thus, the Department’s greatest problem with lack of “pipeline” appears to be among the Technical workforce, the employees, most critical to the accomplishment of the Department’s goals.

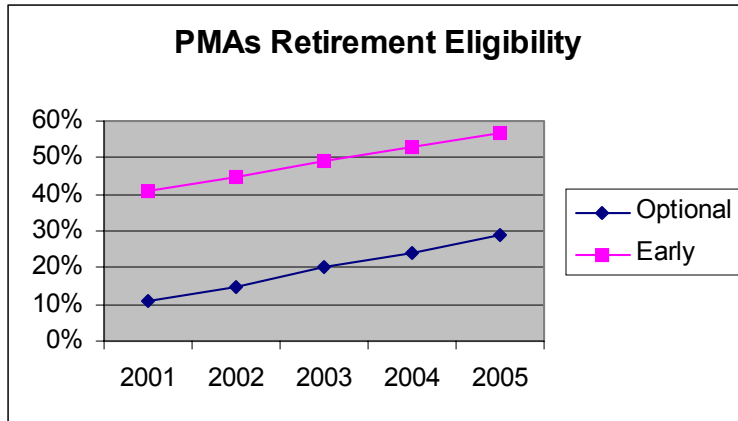
Retirement Eligibility of the Workforce



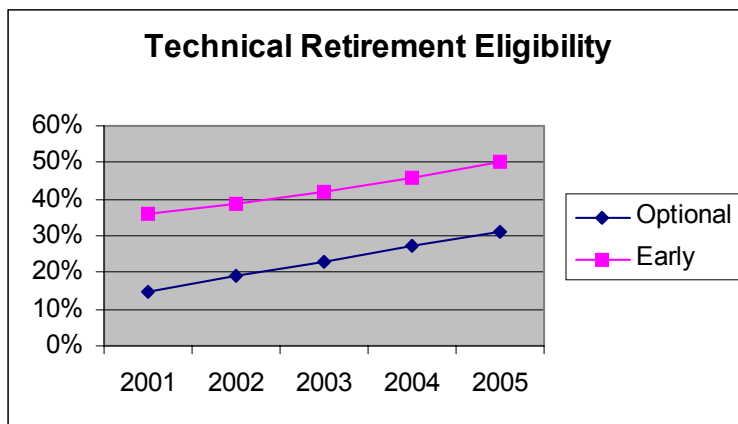
Although the maximum number of permanent employees who could retire this year voluntarily is 13%, that number will increase to 32% by 2005. These numbers are just slightly higher than those for the Federal Government as a whole, as provided by OPM. Of course, not all those who become eligible retire immediately, based on the assumption that on average an employee remains for two years beyond initial eligibility, about one-third of the current workforce will be retired by 2007.



Year-for-year, there is a greater percentage of employees eligible to retire in the Headquarters, averaging about 10% higher than the Field. Thus, using the same assumption about staying two years beyond eligibility, nearly 40% of Headquarters employees will likely retire by 2007, whereas the corresponding level for Field employees is 30%.



In the Power Marketing Administrations, as in the other Field organizations, the optional retirement eligibility rate is considerably less than in Headquarters, although the corresponding rates for early retirement eligibility approach those in Headquarters.



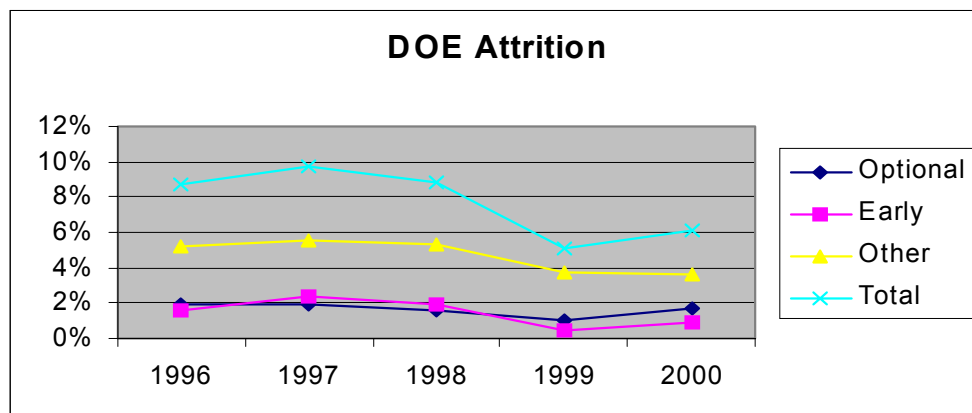
For the Technical workforce the situation concerning both Optional and Early retirement is similar to the Department as a whole.

Retirement Rate Projections:

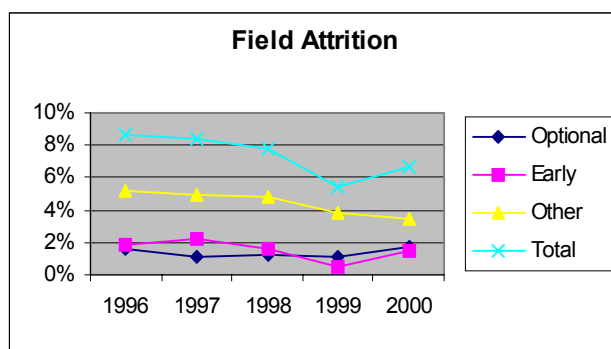
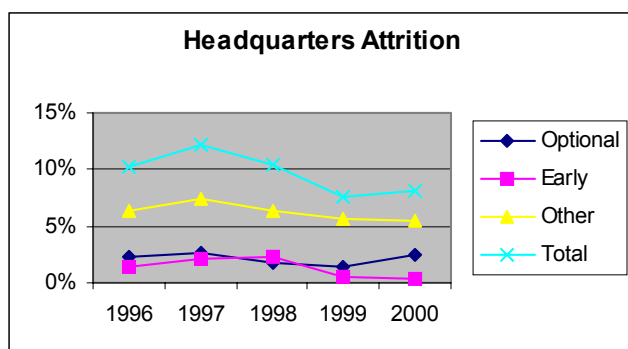
Because so much attention has been paid to the large number of employees becoming eligible for retirement over the next five years, it might be instructive to look at the Department's experience of the last five years, comparing the rates of retirement eligibility to the actual rates of retirement.

Retirements effected have stayed at or below 2% of the total workforce, even while the rate of eligibility has increased from 8% to 12%. As that rate of eligibility continues to grow over the next five years from 13% to 32%, the actual rate of retirement would also be expected to grow. If the assumption is made that about a fifth of those eligible to retire in any given year actually do retire, and that other attrition remains relatively constant, in 2005 it would be expected that about 6% of DOE Federal employees would retire. This agrees closely with the OPM projection of 5% for DOE.

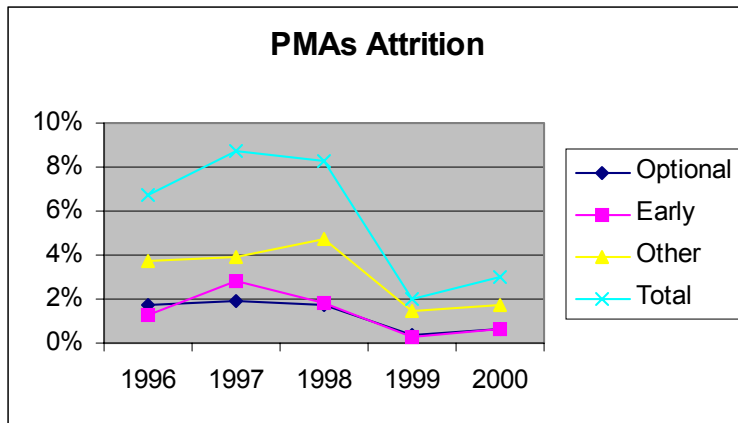
Attrition Experience



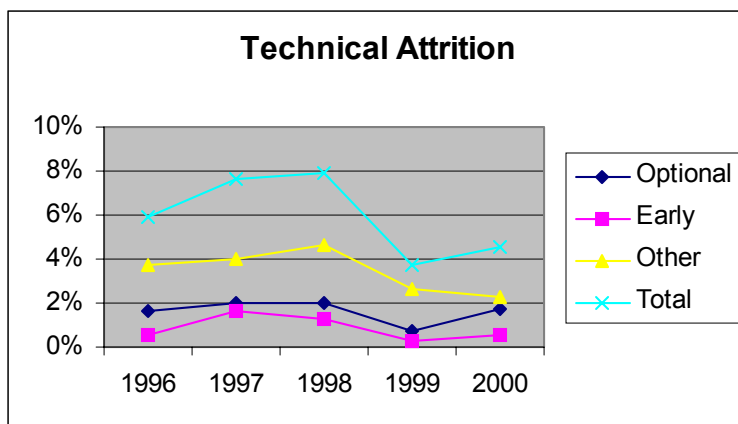
Although both Optional Retirements and Early Retirements have increased slightly in the past year, both are at levels below those of 1996 and 1997. Other attrition has dropped from slightly over 5% in 1996 to less than 4% in 2000, as compared to the Government-wide average of 4%. Total attrition in the Department has dropped from 9% to 6% between 1996 and 2000.



The Headquarters percentages for both Optional Retirement and other attrition are somewhat higher than the Field. Total attrition at Headquarters has gone from 10% to 8% from 1996 to 2000, while attrition in the Field has gone from 9% to 7% during the same period. The greatest rates of attrition, including retirement, over the past five years have occurred in Headquarters.



In the Power Marketing Administrations, Optional Retirement has been below the levels elsewhere in the Department, although Early Retirement has exceeded the levels found in Headquarters and in the Department as a whole, especially in 1996-1998, years in which the Power Marketing Administrations (and Bonneville Power in particular), underwent aggressive changes due to restructuring, using buyouts broadly to reduce overhead. Other attrition, too, has been notably lower than elsewhere in the Department. Thus, overall total attrition has dropped from 7% in 1996 to 3% in 2000, much lower than in any other part of the Department.



For the Technical workforce, Optional Retirement has been at a lower level than in the Department as a whole, although sometimes higher than in the Field and in the Power Marketing Administrations. Early retirement for this population has been lower than for any other employee population, as has other attrition (except for the last two years with respect to the Power Marketing Administrations). From 1996 to 2000, total attrition for the Technical workforce has gone from 6% to 5%, again lower than any part of the Department except the Power Marketing Administrations.

Information, as appropriate, on the agency's seasonal, temporary, and intermittent workforce for FY 2000, including number and occupations of employees in each category and duration and periodicity of employment.

Temporary employment in the Department of Energy in FY 2000 was relatively insignificant and equated to less than 110 FTE or 0.7% of the Federal workforce. The 110 FTE included the following:

- 1.6 FTE for intermittent employment
- 16 FTE years for part-time temporary employment
- 24 FTE years for summer intern programs
- 68 FTE years for full-time temporary employment

Supervisor to staff Ratios – Supervisors/managers as reported to the Central Personnel Data File by occupational title, grade level, geographic location, and supervisor-to-staff ratios. [Note: In a meeting with OMB staff on June 12, it was agreed that ratios would be provided for the Department, Headquarters, Field and Power Marketing Administrations, not for individual supervisors.]

In 1995, the Department had an overall employee to supervisor ratio of 4.2 to 1. As a result of job restructuring and organizational streamlining initiatives since that time, the Department's overall ratio has increased to 8.1 to 1. The ratio at the Headquarters is 7.4 to 1, while the Field ratio is 7.7 to 1. The ratio at the Power Marketing Administrations, due to their aggressive streamlining and their operational nature, is 9.5 to 1.